REMARKS/ARGUMENTS

Applicants gratefully acknowledge the Examiner's finding of allowable subject matter in claim 10.

Further in the Office Action, the Examiner has rejected the only independent claim in the application, i.e., claim 1, under 35 U.S.C. § 103(a) as being unpatentable over Steinway in view of Nobumasa et al. The Examiner argues that Steinway discloses an action part for a piano which is pivotally moved along with depression of a key to thereby transit key depression energy generated by depression of the key to a hammer, wherein the action part is formed by a thermoplastic resin molded article. The Examiner further argues that Steinway also discloses the use of a wippen (8) pivotally moved by being pushed up by the key depression.

Applicants have amended claim 1 to more particularly define the action part of Applicants' claimed invention. Amended claim 1 now claims that the action part is at least one of a wippen, a jack and a repetition lever. As will be further explained below, Applicants respectfully submit that even if Steinway could be broadly interpreted to disclose an "action part" that is formed by a thermoplastic resin molded article, any action part in Steinway which could be argued to be formed by a thermoplastic resin molded article is not an action part which is at least one of a wippen, a jack and a repetition lever, as now claimed by Applicants. In the Office Action, the Examiner has not cited to any particular structure in Steinway which she considers to disclose Applicants' claimed action part, however, Applicants' careful reading of Steinway reveals that the only structure in Steinway that is disclosed as being formed of a resin material is cylindrical bushing 17. Therefore, Applicants respectfully submit that even if Steinway discloses an "action part" (bushing 17) formed of resin, it cannot disclose Applicants' claimed action part, which is at least one of a wippen, a jack and a repetition lever formed by a thermoplastic resin molded article. Even if Steinway discloses a wippen, the disclosed wippen in Steinway is not formed of

resin, but rather of wood. Therefore, Applicants respectfully submit that amended claim 1 is now allowable.

As discussed above, Applicants' invention is directed to an action part for a piano. As recited in claim 1, the action part is at least one of a wippen, a jack and a repetition lever, and is pivotally moved along with depression of a key to thereby transmit key depression energy by depression of the key to a hammer. According to the invention, since the action part is formed by a thermoplastic resin molded article that is molded by a long fiber process and contains long fibers for reinforcement, it can have a very high rigidity compared with an action part made only of a synthetic resin. This makes it possible to reduce transmission loss of key depression energy caused by deformation of the action part occurring when the action part is pushed up by the key, thereby to increase rotational speed of the hammer. (Please see page 4, lines 9-31 of Applicants' specification.)

In contrast, Steinway apparently discloses an action for a piano, including a wippen 8, a jack 10 and a repetition lever 12. However, Steinway is not directed to these main parts 8, 10 and 12 of the action, but to pivots (bearings) 9, 11 and 13 for pivotal connection of the main parts 8, 10 and 12. A bushing 17 of each of the pivots 9, 11 and 13 is formed by a suitable plastic or elastomeric material, preferably a fluorocarbon, retained stationarily held in a hole of the main part, and turns about a metal pin 15 (col. 3, lines 11-31). Thus, the bushing 17 of Steinway may be formed by a thermoplastic resin molded article and might be one part of an action and pivotally moved along with depression of a key 2. However, the bushing 17 is different from any of the main parts 8, 10 and 12 and does not transmit key depression energy to a hammer 3, and therefore is not an "action part" as recited in claim 1. Therefore, even if a fiber reinforced plastic (FRP) layer as disclosed by Nobumasa were used for the bushing 17 of Steinway, the present invention is still not disclosed.

Further, Steinway discloses that the bushing 17 needs resilience or non-rigidity (claim 1 and col. 4, lines 8-12), and that in a piano action, no unusually

high strength properties in the bearing material are required because loads and speeds on the centers (bearings) are very low (col. 4, lines 23-30). On the other hand, the FRP layer of Nobumasa is used for obtaining good strength and high modulus of elasticity and rigidity (col. 2, lines 39-43). Therefore, in addition, there is no motivation to modify the bushing 17 of Steinway with the FRP layer as disclosed by Nobumasa.

Further in Steinway, regarding the main parts of the action such as the wippen 8, the jack 10 and the repetition lever 12, Steinway merely discloses that "[t]he action consists of a series of levers, usually made of wood ..." (col. 1, lines 58-59) (emphasis added). Thus, Steinway does not teach nor suggest that the main parts 8, 10 and 12 of the action are made of material other than wood, and therefore for at least this reason there is no motivation to modify these main parts 8, 10 and 12 of Steinway with the FRP layer as disclosed by Nobumasa.

Further in this Amendment, Applicants have added new dependent claim 11. Claim 11 claims that the long fiber process is one for obtaining a molded article by injection molding of a pellet that is coated with a thermoplastic resin and contains a fibrous reinforcing material containing fibers having a same length as a length of the pellet. Applicants respectfully submit that this feature of Applicants' invention is disclosed in the specification at least at page 4, lines 9-17. Applicants also respectfully submit that even if Nobumasa could be combined with Steinway, Nobumasa does not disclose this process and claim 11 is allowable for at least this additional reason. The FRP layer of Nobumasa is formed by filling a sheet-like or mat-like fibrous layer formed by short or long reinforcing fiber with thermoplastic resin (col. 4, lines 24-46), and is therefore fundamentally different from a molded article molded by the "long fiber process" of the present invention, that is, a molded article by injection molding of a pellet that is coated with a thermoplastic resin and contains a fibrous reinforcing material containing fibers having the same length as the length of the pellet.

Lastly, Applicants wish to bring to the Examiner's attention, if not already, the IDS filed in this application on August, 4, 2005. Applicants

respectfully request that the Examiner provide an initialed copy of the filed Form 1449 to the Applicants in the next communication from the Examiner.

Applicants respectfully submit that the application is now in condition for allowance with claim 1 and claims 2-11, which depend therefrom, being allowable. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response. Please charge any such fee or any deficiency in fees, or credit any overpayment of fees, to Deposit Account No. 05-1323 (Docket 056272.52903US).

Respectfully submitted,

CROWELL & MORING LLP

Dated: December 15, 2005

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Attachments

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Marta N. Sausedo — *Date*